REMARKS

In the Official Action mailed on **24 February 2009**, the Examiner reviewed claims 1-29. Examiner rejected claims 1-29 under 35 U.S.C. § 112. Examiner rejected claims 1-29 under 35 U.S.C. § 103(a) based on Gai et al. (U.S. Pub. No. 2004/0160903, hereinafter "Gai"), Pinto (U.S. Pub. No. 2002/0133622, hereinafter "Pinto"), and Chou et al. (U.S. Patent No. 6,920,106, hereinafter "Chou").

Rejections under 35 U.S.C. § 112

Examiner rejected claims 1, 11-12, 22-23, and 29 under 35 U.S.C. § 112 as being indefinite. More specifically, Examiner avers that the word "if" is recited twice making the limitation vague and indefinite.

Accordingly, Applicant has amended claims 1, 7-8, 11-12, 15-16, 18-19, 22-23, and 29 to replace the word "if" with "responsive to," thus obviating current or future indefinite type of rejections toward these claims.

Rejections under 35 U.S.C. § 103(a)

Examiner rejected claims 1-29 under 35 U.S.C. § 103(a) as being unpatentable over Gai, in view of Pinto, further in view of Chou. Applicant respectfully disagrees with the rejection. There are fundamental differences between embodiments of the present invention and the systems disclosed by Gai, Pinto, and Chou.

Embodiments of the present invention establish two categories for all subnet management packets (SMP) based on **whether the source node** of the packet is a **manager node**, and the **message type** of the packet, such as being a subnet management *request* or subnet management *reply* (see instant application, page 7). SMPs belonging to the first category are characterized by being a

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request from a manager node to an endnode, or being a reply from a manager node to a request from an endnode, while SMPs belonging to the second category are characterized by being a reply from an endnode to a request from a manager node or being a request from an endnode to a manager node (see instant application, claim 1). When a management communication packet is received by a switch, the switch determines the category to which the packet belongs (see instant application, pages 8-9). If the packet is destined to an untrusted node and if the packet belongs to a category that is forbidden to be sent to an untrusted endnode, the system discards the packet (see instant application, page 10 and FIG. 2B). In other words, the system enforces security based on the **packet category and the management status of the endnode from which the packet originated or to which the packet is destined**.

Examiner acknowledges that Gai does not explicitly disclose determining whether the management communication is a first category based on the management class (see office action, page 4, second paragraph). Nevertheless, Examiner avers that Pinto discloses determining whether the management communication is a first category based on the management class of the node the communication originated from and whether the management communication is a request or a reply (see office action, page 4, second paragraph). Applicant respectfully disagrees with the rejection. In the cited text, Pinto nowhere discloses the aforementioned claim limitation (see Pinto, pars. [0038]-[0039], [0051]-[0055], and [0059]-[0062]). Instead, Pinto discloses a method for discovering and mapping elements in a subnet by the subnet manager, which sends out a packet to be broadcasted by switches to other subnet elements (see Pinto, Abstract).

More specifically, in pars. [0038]-[0039], Pinto describes the architecture of a InfiniBand subnet and the discovery process of the subnet manager, in which the subnet manager sends out management packets to map elements in the subnet.

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In pars. [0051]-[0052], Pinto discloses the process of a packet being received by a switch, which copies and rebroadcast the packet from the rest of the switch ports. In pars. [0053]-[0054], Pinto describes the movement of the packets. In par. [0055], Pinto discloses replies are being generated to packets by end nodes receiving the packets. These replies are returned to subnet manager so it can determine the paths within the subnet. In pars. [0059]-[0062], Pinto describes the formats of the packet send by the subnet manager during the discovery process, in which the **management class field** is set to a value indicating a subnet management class using directed route with identifiers. Note that the management class mentioned here is **packet specific**. InfiniBand Specification specifies that IBA management model distinguishes a number of management classes including: Subnet management, subnet administration, communication management, performance management, etc. (see InfiniBand Specification Release 1.1, page 625-626). Thus, determining such management class is not the same as determining whether a node is a manager node. None of the cited paragraphs discloses determining whether the management communication is a first category based on whether the communication is originated from or destined to a manager node, and whether the management communication is a request or a reply. Moreover, nowhere in Pinto is characterizing packets mentioned.

Chou, on the other hand, discloses speculatively forwarding an incoming packet to multiple buffers within the port prior to determining which of the multiple buffers is a target buffer for the packet, decoding the packet, and determining which of the multiple buffer is the target buffer for the packet using the decoded packet (see Chou, Abstract). Chou merely discloses determining whether the packet is a non-VL 15 packet or a VL 15 packet (see Chou, col. 9, ll. 62-67). Note that a VL 15 packet refers to a subnet management packet (see Chou, col. 3, ll. 50-51). Nowhere in Chou is characterizing packets based on whether the node the communication is originated from or destined to is a

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manager node, and whether the management communication is a request or a reply mentioned.

In Summary, Gai and Pinto, in combination with Chou do not disclose characterizing packets based on whether the communication is originated from or destined to is a manager node, and whether the management communication is a request or a reply.

Hence, Applicant respectfully submits that independent claims 1, 11, 12, 22, 23, and 29 as presently amended are in condition for allowance. Applicant also submits that claims 2-10, which depend upon claim 1, claims 13-21, which depend upon claim 12, and claims 24-28, which depend upon claim 23, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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